

MEETING SUMMARY for MERCURY WORK GROUP

Date: January 29, 2003
10:00 am –12:00 pm
Location: 2525 North Shadeland Avenue
Conference Room D
Indianapolis, IN

Present at the meeting:

Tom Barnett (Ispat Inland), John Fekete (Ispat Inland), Robin Feller (JRM), Eric Frye (B.B. Coal), Robin Garibay (Advent Group), Teresa Lewis (City of Carmel), and Tim Lohner (AEP). Participating by way of conference call were Morris Beaton (EPA), Matt Glickman (EPA), Kevin Hoge (Nisource), and Charlotte Read (environmental representative). Representing IDEM were John Donnellan, Meredith Kostek, Steve Roush, Paula Smith, and MaryAnn Stevens.

Paula Smith, Director of IDEM's Office of Planning and Policy, has joined our workgroup in the capacity of group facilitator and to free Steve Roush from this duty so he can focus on the technical aspects of the workgroup's proceedings.

Purpose of the workgroup

The purpose of these Tasks is to determine if there is a need in Indiana for a statewide variance for mercury.

Discussion topics

Task 3 from the Mercury Workgroup Workplan is the "Identification of Background Research Needs". Most of the meeting was spent discussing progress on the ten questions that were developed during the December 10, 2002 meeting. The research documents obtained were presented and additional information that was needed was discussed. A summary is given below:

1. What Hg removal do we get from Wastewater Treatment systems and at what cost?

Tim Lohner provided a tentative study from the state of Ohio that was done by consultants, Foster and Wheeler, and included cost impact analysis. Charlotte Read questioned the validity of the study due to its age.

Robin Garibay offered a copy of the City of Indianapolis mercury variance application done in 2001 that also includes cost analysis of end of pipe mercury control. Robin referred to the bibliography of research and studies included in the Indianapolis application as being comprehensive of the existing material concerning mercury control and treatment.

Robin Garibay also referred to a Maine study of mercury removal that focused on primary and several types of secondary treatment. The Maine study used Method 1631.

There is a study done by the state of Michigan that used the Ohio study as a starting point. The workgroup will try to acquire the Michigan study for inclusion in our collection of documents.

Next Steps: include the Ohio and Michigan studies in our growing library of reference documents. Acquire the EPA sponsored studies at Oak Ridge and Savannah River.

2. How are Water Quality Based Effluent Limits determined from the Hg water quality criteria?

John Donnellan submitted a document on determining effluent limits for Hg from the existing criteria in the GLI and nonGLI areas of the state. In the GLI area, the limits would be:

Monthly ave = .001 ng/l Daily max = .003 ng/l

These limits would apply to a zero flow stream currently and for all discharges after 1/1/04.

For the nonGLI region, the limits would be:

AML = .008 ng/l MDL = .012 ng/l

Varying the number of samples in the calculation may make the AML limit a little less stringent. Robin Garibay suggested some of the calculation need to be reviewed and will be sending her suggestion to John Donnellan.

3. Tom Neltner was not present to talk on pollution prevention and pretreatment. Morris and Matt of EPA stated that EPA accepts that mercury treatment is costly and the focus needs to be placed on pollution prevention. Robin Garibay spoke some about Indianapolis's PP activities. The Duluth (MN) study of West Lake Superior SD concentrated on PP and education. Matt offered that Duluth has no mercury variance; yet, the treatment plant's effluent levels of mercury are coming down through working with the dental community and promoting use of amalgam separators. Duluth is not consistently meeting the GLI limit, but they are coming close and are averaging less than 2 ng/l.

Minutes amendment 2/17/03: Statement of fact that many industrial systems do not remove mercury but the municipal systems do.

4. What is the existing water quality regarding Hg for Indiana?

Eric Frye presented a map of Indiana with surface water sampling locations and Hg concentrations. Additional data from IDEM will be submitted to the group. Paula Smith is looking into whether any groundwater data for Hg is available. Kathy Luther of IDEM's Northwest office is to be contacted regarding the results of mercury sampling done in 2002. Chuck Bell of IDEM is the source of IDEM's stored AIMS data of Method 1631 stream testing. Tim Lohner knows that AEP has done internal plant studies of discharge and of the Ohio River background using Method 1631. Tim will have to check with company officials about release of AEP information.

Next Step: acquire more information.

5. What are the differences between the GLI and nonGLI mercury criteria?

John's discussion to question 2 above touched on this answer as well.

6. Do we need a statewide mercury variance and which discharges would need a variance?

This question was to be addressed by Tom Neltner. Tom was also to address the basic purpose of the workgroup to determine if there is no manner other than a variance to achieve the necessary ends of being able to issue discharge permits that won't be appealed due to impossibility of meeting the mercury limit.

7. What are other States doing to address this issue? What have they discovered about Mercury?

Steve Roush presented a comparison document containing information about the Hg policies for the states of Michigan, Minnesota, Ohio, and Maine. Morris stated the strategies for these four states are draft. All the state strategies in the comparison document are leaning toward a statewide variance but with pollution minimization programs. EPA has sent us some information and may send more if available.

In answer to a question from Charlotte, Steve stated that Indiana does require the use of Method 1631 for data used on a variance, a discharge permit, permit applications, and the process to determine if the discharge has a reasonable potential to discharge at levels above the water quality based effluent limits.

8. What are the sources of Hg in wastewater?

Paula Smith offered to supply information on this topic before the next meeting.

Robin Garibay stated that the mercury level in the ambient water source to industry and a POTW is almost directly reflected in the discharge as the only treatment is through physical settling while industrial processes such as boiler operation, cooling towers, and various reuse/recycle operations serve to concentrate mercury in the discharge.

Robin Garibay suggested that we look at the Pollution Prevention Conference of East Lansing, Michigan Mercury Reduction Plan.

9. What is the status of the MACT (maximum achievable control technology) standard for Hg in air emissions and the schedule of compliance?

Kevin Hoge said that EPA might have a draft rule by the end of 2003 and a final rule by the end of 2004.

10. What can we do to reduce Hg discharges from dental offices?

Paula Smith offered to supply information on this topic before the next meeting. She also referred everyone to IDEM's mercury webpage (<http://www.IN.gov/idem/mercury/>) that also has links to numerous EPA studies and information sources.

Additional topics that need to be researched or documents collected:

- Effluent Hg data from wastewater treatment plants
- Hg levels in ground water – (Paula Smith)
- EPA guidance manual on mercury (EPA)
- Draft guidance on Pollution minimization programs (EPA)
- The Wisconsin permitting strategy and rule web address (EPA)

Organization of the research documents

MaryAnn Stevens volunteered to organize the research documents. It is planned to convert the documents to electronic format (if possible) and place them in a file folder. All documents are going to be sent to MaryAnn with a summary if the document is very long. Paula Smith volunteered to look into putting these documents on the IDEM web site. We are trying to get all documents to MaryAnn by Feb 12.

Developing of a Technical Document regarding Background Research

The Workplan requires that the group prepare a Technical Document regarding Background Research. Steve volunteered to start a draft outline for this report. A state of Ohio document may be used as a template.

Next meeting

The next meeting is scheduled for March 3, 2003, from 10:00 A.M. to noon, at the IDEM Shadeland office, conference room C.